ENGINEERING AIDE III

<u>DISTINGUISHING FEATURES OF THE CLASS</u>: This is routine to complex technical engineering work in connection with any branch of engineering performed in the field, office or drafting room. Assignments are given orally and in writing and are general in nature, affording some opportunities for the use of independent judgment. Work may be checked in progress and is generally checked upon completion by an engineering superior.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

- Participates as a member of field crew, survey crew, may supervise work, takes notes, makes sketches of work performed, makes contact with the general public, and is responsible for the work results;
- Performs supervisory or technical drafting (AutoCad) work such as that involved in detailing engineering drawings and familiarity with GIS systems;
- Participates in the preparation and review of public works plans, such as those for water system, sewerage, street or bridge construction;
- Prepares general and special purposes maps;
- Checks contract drawings;
- Computes quantities of waste, fill, construction material and other items;
- Investigates complaints and prepares reports;
- Prepares conditions of approval for development projects; provides review and comments on progress of development projects;
- Inspects contract work in a specialized engineering field such as water and sewer improvements;
- Makes preliminary and final estimates on engineering projects;
- Prepares records, charts and statistical information of a technical nature;
- Analyzes data as it comes from the field;
- Checks the work of engineering aides of lower grades;
- Does related work as required.

<u>FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL</u> CHARACTERISTICS:

- Thorough knowledge of the principles, techniques and practices of surveying;
- Thorough knowledge of the principles, practices and instruments used in engineering and computer aided drafting;
- Thorough knowledge of word processing, spreadsheets and database software applications;
- Good knowledge of GIS systems;
- Good knowledge of engineering principles and practices;
- Good knowledge of mathematics through trigonometry ands its application to field surveying and engineering computations;

- Good knowledge of construction specifications and plans, and of the regulations relating to public works construction by contract, sanitary and environmental permitting;
- Good knowledge of sanitary and environmental permitting;
- Skill in the use of engineering instructions and equipment;
- Ability to perform moderately difficult technical computations, to make estimates and tests, and to compile simple engineering data and statistics;
- Ability to perform field and office tasks to gather, analyze and record data, prepare a variety of memos, letters, and other correspondence related to plan reviews and regulatory compliance;
- Ability to engage in continuous field work requiring physical stamina;
- Ability to make engineering drawings;
- Ability to establish and maintain effective working relationships with other engineering and surveying personnel, contractors and the general public;
- Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS:

- A. Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a Bachelor's Degree in Engineering; **OR**
- B. Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a Bachelor's Degree in Engineering Technology and two (2) years paid fulltime experience in sub-professional engineering work; **OR**
- C. Graduation from a regionally accredited college or one accredited by the New York State Board of Regents to grant degrees with an Associate's Degree in engineering and five (5) years of paid fulltime experience in sub-professional engineering work.

SPECIAL NOTE: A valid New York State driver's license is required at the time of appointment and for the duration of employment.

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